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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,483	03/07/2001	Raymond M. Broemmelsiek	C4-971B	4629
26799	7590 03/29/2004		EXAMINER	
IP LEGAL DEPARTMENT			PHILIPPE, GIMS S	
TYCO FIRE & SECURITY SERVICES ONE TOWN CENTER ROAD		ART UNIT	PAPER NUMBER	
BOCA RATON, FL 33486			2613	
			DATE MAILED: 03/29/2004	7

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commence	09/801,483	BROEMMELSIEK, RAYMOND M.			
Office Action Summary	Examiner	Art Unit			
	Gims S Philippe	2613			
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a reply be tined by within the statutory minimum of thirty (30) day of will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>07</u>	March 2001.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) <u>1-27</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrest.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) <u>1-3,5-8,10-12,14,16-19,21-24,26 are</u> .  7) ☐ Claim(s) <u>4,9,13,15,20 and 25</u> is/are objected.  8) ☐ Claim(s) are subject to restriction and	rawn from consideration.  ad 27 is/are rejected. to.				
Application Papers					
9) ☐ The specification is objected to by the Examin 10) ☑ The drawing(s) filed on <u>07 March 2001</u> is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examination is objected to by the Examination is objected.	a)⊠ accepted or b)⊡ objected to e drawing(s) be held in abeyance. Sec ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicati ority documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 4.5.</li> </ol>	Paper No(s)/Mail Da  5) Notice of Informal P  6) Other:	ate Patent Application (PTO-152)			

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## **DETAILED ACTION**

This is a first office action in response to application no. 09/801,483 field on March 7<sup>th</sup> 2001 in which claims 1-27 are presented for examination.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 5-8, 12, 14, 16-19, 21, 22-24, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchi (US Patent no. 5,434,617) in view of Watanabe et al. (US Patent no. 5,694,625).

Regarding claims 1, 12, and 17, Bianchi discloses an apparatus, system, and method for holding an object of interest in a field of view of movable camera, the object of interest being selected from a plurality of moving detected objects in the field of view (See Bianchi's Abstract), the apparatus, system, and method comprises the steps of receiving an indication of the object of interest, generating movement signals for the movable camera based on a difference between a current position of the movable camera (See Bianchi col. 3, lines 40-42, lines 52-59 and col. 4, lines 46-52).

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It is noted that although Bianchi provides the difference representing the present location of the moving target (See Bianchi col. 4, lines 24-35), it is silent about predicting the future position of the target as well as the future position of the moving camera as claimed.

However, Watanabe et al. discloses an apparatus, system, and method for holding an object of interest in a field of view including the step of predicting the future position of the target as well as the future position of the moving camera (See Watanabe fig. 18, item S708, and col. 11, lines 43-47).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Bianchi's tracking system by incorporating Watanabe's step of predicting the future position of the target as well as the future position of the moving camera. The motivation for performing such a modification in Bianchi is to recognize an object low in the image plane movement speed as a moving object in order to take photographs in focus as taught by Watanabe (See Watanabe col. 3, lines 15-23).

As per claims 5, 14, 21, and 24, the additional limitations such as "transmitting/receiving indication of the detected/selected moving object"; and "generating movement signals for the movable camera" are considered met by the rejections of claims 1, 12, and 17 as seen in Bianchi col. 3, lines 40-42, lines 52-59 and col. 4, lines 46-52, and Bianchi col. 4, lines 24-35.

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As per claims 2, 7, 18, and 23, most of the limitations of these claims have been noted in the above rejection of claims 1, 5, and 17. In addition, the step of providing velocity and acceleration parameters are found in calculating the position of the moving target (motion/moving vector) as disclosed in col. 4, lines 4-26.

As per claims 3, 8, and 19, most of the limitations of these claims have been noted in the above rejection of claims 1, 5, and 17. In addition, the control signals to move the movable camera is disclosed in Bianchi col. 3, lines 52-58.

As per claims 6, 11, 22, and 27, most of the limitations of these claims have been noted in the above rejection of claims 5, and 21. In addition, Bianchi further determines the difference between the first time point and current time point, along with the location of the object of interest (See Bianchi col. 4, lines 17-26, and lines 30-40).

As per claims 10, 16, and 26, most of the limitations of these claims have been noted in the above rejection of claims 6, 14, and 22. In addition, Bianchi further discloses storing the video signal received between the first time point and the current time point (See Bianchi fig. 5, cameras 110 and 120, database 512, and col. 8, lines 40-43).

3. Claims 4, 9, 13, 15, 20 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Osen (US Patent no. 6,650,360) teaches camera guidance system.

Tang et al. (US Patent no. 5,878,151) teaches moving object tracking.

Watanabe (US Patent no. 5,739,856) teaches photographic subject position predicting apparatus.

Taniguchi (US Patent no. 5,991,428) teaches moving object detection apparatus and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gims S Philippe Primary Examiner Art Unit 2613

**GSP** 

March 24, 2004